# Thomas Fire Recreation BAER Report
# Phase 2 (Santa Barbara & Backcountry Parts) – LPF

Resource Specialty: Recreation
Fire Name: Thomas
Month and Year: January 2018
Author(s) Name and Home Unit Name:
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Franklin Trail, January, 2017

I. **Potential Values at Risk** (identified prior to the on-the-ground survey)
Within the boundary of the Thomas Fire perimeter the values at risk include:

- The threat to life and safety of forest visitors using national forest system trails, designated day use and campgrounds on the Santa Barbara Ranger District;

- The threat to property, which is the potential damage to, or loss of, recreation sites and segments of the trail system within or adjacent to the burn area. See Table  and Table .

**Table 1: Trails Affected by the Thomas Fire**

| Trail Name | Trail Number | Trail Class | Designed Use | Miles in Burn Footprint | Mid-Slope Miles in Moderate to High Soil Burn Severity |
|---|---|---|---|---|---|
| West Fork Cold Springs | (27W16) | TC3 | hike/equestrian/bike | 1.47 | 1.32 |
| Cold Springs Trail | (26W10) | TC3 | hike/equestrian/bike | 4.51 | 4.36 |
| San Ysidro Trail | (26W15) | TC3 | hike/equestrian/bike | 4.14 | 3.99 |
| Romero Trail | (26W14) | TC3 | hike/equestrian/bike | 7.36 | 7.21 |
| Franklin Trail | (25W09) | TC3 | hike/equestrian/bike | 5.35 | 5.05 |
| N. Fork Matilija Trail | (23W07) | TC4 | hike/equestrian | 7.99 | 1.50 |

| | | | | | |
|---|---|---|---|---|---|
| Murietta Trail | (24W07) | TC3 | hike/equestrian/bike | 1.71 | 0.50 |
| Pratt Trail | (23W09) | TC3 | hike/equestrian/bike | 2.60 | 2.60 |
| Howard Creek Trail | (22W26) | TC3 | hike/equestrian/bike | 2.91 | 0.05 |
| Lion Canyon Trail | (22W06) | TC3 | hike/equestrian/bike | 5.71 | 1.71 |
| Last Chance Trail | (21W09) | TC3 | hike/equestrian/bike | 7.12 | 1.20 |
| Santa Paula Canyon Trail | (21W11) | TC3 | hike/equestrian/bike | 6.12 | 0.34 |
| Santa Paula Peak Trail | (20W16) | TC3 | hike/equestrian/bike | 4.59 | 2.18 |
| Red Reef Trail | (21W08) | TC3 | hike/equestrian/bike | 3.76 | 2.87 |
| Divide Peak OHV Route | (26W21) | | Off Highway Vehicle | 4.31 | 2.16 |
| | | | **TOTAL** | 69.65 | 37.04 |

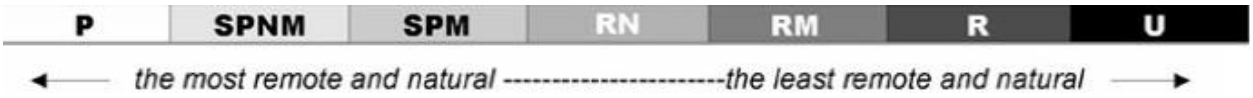
**Table 2: Recreation Sites Affected by the Thomas Fire**

| **Name** | **Type** | **Description** |
|---|---|---|
| Big Caliente | Day Use Area | Picnic table, vault toilet; no running water |
| Upper Lake | Day Use Area | Vault toilets, trash can |
| Lower Lake | Day Use Area | 2 single SSTs |
| Rock Creek | Campground | Rustic campground with picnic tables and fire rings; vault toilet; no running water |
| Middle Santa Ynez | Campground | Rustic campground with picnic tables and fire rings; no running water |
| P-Bar | Campground | Rustic campground with picnic tables and fire rings; no running water |
| Mono | Campground | Rustic campground with picnic tables and fire rings; no running water |
| Rose Valley | Campground | Picnic tables, fire rings, pedestal BBQs; no running water |
| Middle Lion | Campground | Picnic tables, fire rings, pedestal BBQs; no running water |
| Holiday | Group Campground | Picnic tables, fire rings, group BBQ and table, no running water |
| Divide Peak | OHV Staging Area | Vegetation burned off creating unsafe conditions and allowing unauthorized OHV access |

**A. Critical Values:** Critical values as described by FSM 2523.1 – Exhibit 01 are human life and safety, property, natural resources and cultural and heritage resources. This specialist report focuses on human life and safety, and property within the analysis areas of the mountains and foothills north of Highway 192 near the communities of Santa Barbara, Montecito, Summerland, and Carpinteria.

Recreation constitutes a major use of public lands and returns significant economic value to the local economy ($33 for each dollar spent on recreation).[1] Recreation offerings within the Thomas Fire area fill a critical niche in the Recreation Opportunity Spectrum (ROS) by providing a mixture of Roaded Natural (RN) and Semi-Primitive Motorized (SPNM) experience. See Table 1 below, "Recreation Opportunity Spectrum."

**Table 1: Recreation Opportunity Spectrum (ROS)**




ROS Key: P ⇒ Primitive
SPNM ⇒ Semi-primitive Non-Motorized
SPM ⇒ Semi-primitive Motorized
RN ⇒ Roaded Natural
RM ⇒ Roaded Modified
R ⇒ Rural
U ⇒ Urban

## B. Resource Condition Assessment

(a) **Resource Setting:** The Thomas Fire is located on the Santa Barbara and Ojai Ranger District of the Los Padres National Forest. It began on December 4, 2017 near St. Thomas Aquinas College in Santa Paula, and quickly grew in size and complexity due to extreme weather and associated wind conditions. It has since burned 281,893 acres, becoming the largest California wildfire in modern recorded history. It is currently 92% contained to date. The affected area encompasses Ventura and Santa Barbara counties. On Dec. 9, a condensed Burned Area Emergency Response (BAER) team was assembled to conduct an initial rapid assessment was for the Ojai Ranger District portion of the fire. This report addresses the recreation values at risk for both the Santa Barbara Ranger District (SBRD) and the Ojai Ranger District (ORD).

The Santa Barbara front country trails offer a wide range of recreational opportunities in close proximity to the communities of Santa Barbara, Montecito, Summerland, and Carpinteria. They are very popular and receive high use from locals and out of town visitors. The affected developed sites, Off Highway Vehicle (OHV) staging area and associated trail are located in the Upper Santa Ynez Recreation area and access is limited to partial pavement and several miles of dirt road. Within 5 miles of the coast, elevations range to 3,800 feet along the East Camino Cielo Road with a corresponding vegetation change that includes grasslands, chaparral, and oak woodlands at lower and mid-elevations.

[1] USFS, Washington Office, "Recreation Vision", PowerPoint presentation, 2014.

The Ojai front country trails offer a range of recreational opportunities in close proximity to the community of Ojai. They are very popular and receive high use from the locals and out of town visitors. The predominately south-facing slopes are dominated by chaparral with areas of grassland and oak woodland at lower elevations. The affected developed sites are accessed via Highway 33, also known as Jacinto Reyes National Scenic Byway.

**(b) Findings of the On-The-Ground Survey:**

1. **Non-motorized Trails:** West Fork Cold Springs (27W16); Cold Springs Trail (26W10); San Ysidro Trail (26W15); Romero Trail (26W14); Franklin Trail (25W09); North Fork Matilija Trail (23W07); Murietta Trail (24W07); Pratt Trail (23W09); Howard Creek Trail (22W26); Lion Canyon Trail (22W06); Last Chance Trail (21W09); Santa Paula Canyon Trail (21W11); Santa Paula Peak Trail (20W16); Red Reef Trail (21W08)
2. **Developed Sites:** Big Caliente Day Use Area; Rock Creek Campground; Middle Santa Ynez Campground; P-Bar Campground; Holiday Group Campground; Rose Valley Campground; Middle Lion Campground; Upper Lake Day Use Area; Lower Lake Day Use Area; and Piedra Blanca Trailhead.
3. **Off Highway Vehicle (OHV) Use** – Divide Peak Staging Area and associated Divide Peak OHV Route (26W21; 5N12).

**(c) Consequences of the fire on values at risk:**

The values at risk include a combination of segments of National Forest System trails, developed recreation sites, an OHV Staging Area and associated route. As a direct consequence of the moderate burn severity and erodible soil types, there is a high risk of moderate trail damage caused by the loss of existing water control features. Increased flow rates can be expected following the loss of vegetation. This increased flow rate will result in mid-slope trails becoming covered by dry ravel and debris. In addition, fire-damaged trees will fall across the trail. Not only will this added material result in trail tread eroding flow patterns, but it will also obscure existing trail definition causing users to wander off of the established trail, especially at switchbacks. Repeated off-trail travel will eventually re-define a new trail that will most likely be non-conducive to natural water flow and subject to continued and enhanced erosion.

All segments of the system trails have been found to be at high risk of damage and/or loss within the perimeter of the Thomas Fire. These findings are based on a sample on-the-ground survey, their proximity to moderate burn severity areas, and erosion hazard modeling based on slope, soil characteristics, and burn severity.

Big Caliente, Upper Lake and Lower Lake Day Use Areas, Holiday Group, Rose Valley, Middle Lion, Rock Creek, Middle Santa Ynez, and P-Bar Campgrounds, and Piedra Blanca Trailhead, have been found to be at high risk of damage and/or loss within the area affected by the Thomas Fire. These findings are based on a sample on-the-ground survey, their proximity to moderate burn severity areas, and erosion hazard modeling based on slope, soil characteristics, and burn severity.

Divide Peak Staging area and associated OHV route have been found to be at high risk of damage and/or loss within the perimeter of the Thomas Fire. These findings are based on a sample on-the-ground survey, the proximity to moderate burn severity areas, and erosion hazard modeling based on slope, soil characteristics, and burn severity. The staging area and OHV route are denuded of vegetation which greatly increases the risk of public safety and potential resource damage.

## II. BAER Risk Assessment

BAER Risk Assessment is conducted using the chart in Table 3 below.

**Table 3: BAER Risk Assessment Chart**

| **Probability of Damage or Loss** | **Magnitude of Consequences** | | |
|---|---|---|---|
| | Major | Moderate | Minor |
| | **RISK** | | |
| Very Likely | **Very High** | **Very High** | **Low** |
| Likely | **Very High** | **High** | **Low** |
| Possible | **High** | **Intermediate** | **Low** |
| Unlikely | **Intermediate** | **Low** | **Very Low** |

**C. Emergency Determination –**

a. West Fork Cold Springs Trail (27W16): This trail has had limited pre-fire maintenance of existing water drainage features. These pre-existing risks to the trail will be exacerbated by post-fire conditions. Therefore, post-fire storm inspections and emergency repairs are required in order to maintain the existing capital investment.

Probability of Damage or Loss: Likely
Magnitude of Consequence: Moderate
Risk Level: High

b. Cold Springs Trail (26W10): This trail has had limited pre-fire maintenance of existing water drainage features. These pre-existing risks to the trail will be exacerbated by post-fire conditions. Therefore, post-fire storm inspections and emergency repairs are required in order to maintain the existing capital investment.

Probability of Damage or Loss: Likely
Magnitude of Consequence: Moderate
Risk Level: High

c. San Ysidro Trail (26W15): This trail has had limited pre-fire maintenance of existing water drainage features. These pre-existing risks to the trail will be exacerbated by post-fire conditions. Therefore, post-fire storm inspections and emergency repairs are required in order to maintain the existing capital investment.

Probability of Damage or Loss: Likely

Magnitude of Consequence: Moderate
Risk Level: High

d. Romero Trail (24W14): This trail has had limited pre-fire maintenance of existing water drainage features. These pre-existing risks to the trail will be exacerbated by post-fire conditions. Therefore, post-fire storm inspections and emergency repairs are required in order to maintain the existing capital investment.
   Probability of Damage or Loss: Likely
   Magnitude of Consequence: Moderate
   Risk Level: High
e. Franklin Trail (25W09): This trail has had limited pre-fire maintenance of existing water drainage features. These pre-existing risks to the trail will be exacerbated by post-fire conditions. Therefore, post-fire storm inspections and emergency repairs are required in order to maintain the existing capital investment.
   Probability of Damage or Loss: Likely
   Magnitude of Consequence: Moderate
   Risk Level: High
f. Big Caliente Day Use Area: This area includes erodible soil type(s) and geologic effects brought on by vegetation loss. This may increase the potential for slope failure and associated mud flows to the site.
   Probability of Damage or Loss: Likely
   Magnitude of Consequence: Moderate
   Risk Level: High
g. Rock Creek Campground: This area includes erodible soil type(s) and geologic effects brought on by vegetation loss. This may increase the potential for slope failure and associated mud flows to the site.
   Probability of Damage or Loss: Likely
   Magnitude of Consequence: Moderate
   Risk Level: High
h. Middle Santa Ynez Campground: This area includes erodible soil type(s) and geologic effects brought on by vegetation loss. This may increase the potential for slope failure and associated mud flows to the site.
   Probability of Damage or Loss: Likely
   Magnitude of Consequence: Moderate
   Risk Level: High
i. P-Bar Campground: This area includes erodible soil type(s) and geologic effects brought on by vegetation loss. This may increase the potential for slope failure and associated mud flows to the site.
   Probability of Damage or Loss: Likely
   Magnitude of Consequence: Moderate
   Risk Level: High

j. Divide Peak OHV Staging Area and OHV Route: All of the vegetation around this OHV staging area has experienced loss of vegetation and the area poses a safety risk to the public and has a high potential for resource damage. Therefore, emergency repairs are required in order to maintain the existing capital investment.

Risk to Property

Probability of Damage or Loss: Very Likely
Magnitude of Consequence: Moderate
Risk Level: Very High

k. Divide Peak OHV Route: The OHV route has had limited pre-fire maintenance of existing water drainage features. These pre-existing risks to the trail will be exacerbated by post-fire conditions. Therefore, post-fire storm inspections and emergency repairs are required in order to maintain the existing capital investment.

Probability of Damage or Loss: Likely
Magnitude of Consequence: Moderate
Risk Level: High

l. North Fork Matilija Trail (23W07): This WILDERNESS trail has had limited pre-fire maintenance of existing water drainage features. These pre-existing risks to the trail will be exacerbated by post-fire conditions. Therefore, post-fire storm inspections and emergency repairs are required in order to maintain the existing capital investment.

Probability of Damage or Loss: Likely
Magnitude of Consequence: Moderate
Risk Level: High

m. Murietta Trail (24W07): This trail has had limited pre-fire maintenance of existing water drainage features. These pre-existing risks to the trail will be exacerbated by post-fire conditions. Therefore, post-fire storm inspections and emergency repairs are required in order to maintain the existing capital investment.

Probability of Damage or Loss: Likely
Magnitude of Consequence: Moderate
Risk Level: High

n. Pratt Trail (23W09): This trail has had limited pre-fire maintenance of existing water drainage features. These pre-existing risks to the trail will be exacerbated by post-fire conditions. Therefore, post-fire storm inspections and emergency repairs are required in order to maintain the existing capital investment.

Probability of Damage or Loss: Likely
Magnitude of Consequence: Moderate
Risk Level: High

o. Howard Creek Trail (22W26): This trail has had limited pre-fire maintenance of existing water drainage features. These pre-existing risks to the trail will be exacerbated by post-fire conditions. Therefore, post-fire storm inspections and emergency repairs are required in order to maintain the existing capital investment.

Probability of Damage or Loss: Likely
Magnitude of Consequence: Moderate
Risk Level: High

p. Lion Canyon Trail (22W06): This trail has had limited pre-fire maintenance of existing water drainage features. These pre-existing risks to the trail will be exacerbated by post-fire conditions. Therefore, post-fire storm inspections and emergency repairs are required in order to maintain the existing capital investment.

Probability of Damage or Loss: Likely
Magnitude of Consequence: Moderate
Risk Level: High

q. Last Chance Trail (21W09): This trail has had limited pre-fire maintenance of existing water drainage features. These pre-existing risks to the trail will be exacerbated by post-fire conditions. Therefore, post-fire storm inspections and emergency repairs are required in order to maintain the existing capital investment.

Probability of Damage or Loss: Likely
Magnitude of Consequence: Moderate
Risk Level: High

r. Santa Paula Canyon Trail (21W11): This trail has had limited pre-fire maintenance of existing water drainage features. These pre-existing risks to the trail will be exacerbated by post-fire conditions. Therefore, post-fire storm inspections and emergency repairs are required in order to maintain the existing capital investment.

Probability of Damage or Loss: Likely
Magnitude of Consequence: Moderate
Risk Level: High

s. Santa Paula Peak Trail (20W16): This trail has had limited pre-fire maintenance of existing water drainage features. These pre-existing risks to the trail will be exacerbated by post-fire conditions. Therefore, post-fire storm inspections and emergency repairs are required in order to maintain the existing capital investment.

Probability of Damage or Loss: Likely
Magnitude of Consequence: Moderate
Risk Level: High

t. Red Reef Trail (21W08): This trail has had limited pre-fire maintenance of existing water drainage features. These pre-existing risks to the trail will be exacerbated by post-fire conditions. Therefore, post-fire storm inspections and emergency repairs are required in order to maintain the existing capital investment.

Probability of Damage or Loss: Likely
Magnitude of Consequence: Moderate
Risk Level: High

u. Holiday Group Campground: This area includes erodible soil type(s) and associated geologic effects brought on by vegetation loss. This may increase the potential for slope failure and associated mud flows to the site.
   Probability of Damage or Loss: Likely
   Magnitude of Consequence: Moderate
   Risk Level: High

v. Rose Valley Campground: This area includes erodible soil type(s) and there are associated geologic effects brought on by vegetation loss. This may increase the potential for slope failure and associated mud flows to the site.
   Probability of Damage or Loss: Likely
   Magnitude of Consequence: Moderate
   Risk Level: High

w. Middle Lion Campground: This area includes erodible soil type(s) and there are associated geologic effects brought on by vegetation loss. This may increase the potential for slope failure and associated mud flows to the site.
   Probability of Damage or Loss: Likely
   Magnitude of Consequence: Moderate
   Risk Level: High

x. Upper Lake Day Use Area: This area includes erodible soil type(s) and there are associated geologic effects brought on by vegetation loss. This may increase the potential for slope failure and associated mud flows to the site.
   Probability of Damage or Loss: Likely
   Magnitude of Consequence: Moderate
   Risk Level: High

y. Lower Lake Day Use Area: This area includes erodible soil type(s) and there are associated geologic effects brought on by vegetation loss. This may increase the potential for slope failure and associated mud flows to the site.
   Probability of Damage or Loss: Likely
   Magnitude of Consequence: Moderate
   Risk Level: High

## D. Treatments to Mitigate the Emergency

(a) Treatment Type

To mitigate threats to life and safety, close trails and recreation sites affected by the fire (as part of an area closure) for the first winter following the fire, and prior to lifting the closure, install warning signs at all trailheads within or leading to the burned area.

To mitigate threats to property, install trail structures to maintain natural drainage patterns and maintain trail stability during increased flows. This will prevent further erosion caused by the loss of vegetation and root systems previously supporting out trail edge. Armoring key ephemeral drainages is done to dissipate energy across trail water flows and prevent down slope head cutting and associated trail loss. There are approximately37 miles of trail needing treatment.

Periodic trail inspections will be needed to monitor the effectiveness of the treatments. The inspections should be conducted after significant weather events. The inspectors will correct minor problems and report significant issues on the trail. They should also check for public usage of the trail in order to monitor the effectiveness of the forest closure. Based on information gathered on treatment effectiveness monitoring, an interim request may be submitted to the region for consideration for additional funding to correct problems in response to unforeseen storm damage.

**Trail Closure:** All trails and recreation sites affected by the fire should be closed for the first winter following containment/control of the fire. Conditions following the first winter should be evaluated to judge if additional time is needed to provide for user safety or resource protection. If additional time is needed, it can be obtained through an extension of the existing Forest Order 05-07-00-17-14 mandating an area closure and leaving existing closure signage in place.

Prior to lifting the closure, warning signs should be installed at all trailheads within or leading to the burned area. This will make visitors aware of potential hazardous conditions that may remain. All trailheads providing access to burn area will requiring warning signs.

**Storm Proofing:** Storm proofing is the minimum necessary trail work activity that will protect the trail investment in its current state and guard it from the expected seasonal weather. This is not an attempt to perform deferred maintenance objectives or improve the trail.

**Storm Inspection Response:** While performing post-storm inspections the designated trail inspector will correct minor drainage issues and report significant drainage issues on the trail prism.

(b) Treatment Objective

To provide for public safety, crew safety, and to protect the trails and developed recreation sites as a capital investment and retain all as a recreational opportunity.

(c) Treatment Description

Trail and Developed Recreation Site Closure: Close all trails and developed sites affected by the Thomas Fire minimally through the winter. This allows the unstable slopes to stabilize as vegetation is naturally re-established.

(d) Estimated Treatment Recommendations and Cost

**Table 4: BAER Treatment Recommendations**

| Site/Trail | Recommended Emergency Response Action | Recommended Specific Action |
|---|---|---|
| **West Fork Cold Spring Trail (27W16)** | Trail Prism Drainage Treatment and Monitoring | Clean out approximately 67 existing rolling dips, armor 2 drainage crossings, and install approximately 8 new rolling dips |

| | | |
|---|---|---|
| **Cold Spring Trail (26W10)** | Trail Prism Drainage Treatment and Monitoring | Clean out approximately 203 existing rolling dips, armor 5 drainage crossings, and install approximately 23 new rolling dips |
| **San Ysidro Trail (26W15)** | Trail Prism Drainage Treatment and Monitoring | Clean out approximately 187 existing rolling dips, armor 5 drainage crossings, and install approximately 21 new rolling dips |
| **Romero Trail (26W14)** | Trail Prism Drainage Treatment and Monitoring | Clean out approximately 332 existing rolling dips, armor 8 drainage crossings, and install approximately 37 new rolling dips |
| **Franklin Trail (25W09)** | Trail Prism Drainage Treatment and Monitoring | Clean out approximately 241 existing rolling dips, armor 6 drainage crossings, and install approximately 27 new rolling dips |
| **N. Fork Matlija Trail (23W07)** | Trail Prism Drainage Treatment and Monitoring | Clean out approximately 68 existing rolling dips, armor 2 drainage crossings, and install approximately 7 new rolling dips |
| **Murietta Trail (24W07)** | Trail Prism Drainage Treatment and Monitoring | Clean out approximately 23 existing rolling dips, armor 1 drainage crossings, and install approximately 2 new rolling dips |
| **Pratt Trail (23W09)** | Trail Prism Drainage Treatment and Monitoring | Clean out approximately 117 existing rolling dips, armor 3 drainage crossings, and install approximately 13 new rolling dips |
| **Howard Creek Trail (22W26)** | Trail Prism Drainage Treatment and Monitoring | Clean out approximately 3 existing rolling dips, armor 1 drainage crossings, and install approximately 1 new rolling dip |
| **Lion Canyon Trail (22W06)** | Trail Prism Drainage Treatment and Monitoring | Clean out approximately 77 existing rolling dips, armor 2 drainage crossings, and install approximately 9 new rolling dips |
| **Last Chance Trail (21W09)** | Trail Prism Drainage Treatment and Monitoring | Clean out approximately 54 existing rolling dips, armor 2 drainage crossings, and install approximately 6 new rolling dips |
| **Santa Paula Canyon Trail (21W11)** | Trail Prism Drainage Treatment and Monitoring | Clean out approximately 16 existing rolling dips, armor 6 drainage crossings, and install approximately 1 new rolling dip |

| | | |
|---|---|---|
| **Santa Paula Peak Trail (20W16)** | Trail Prism Drainage Treatment and Monitoring | Clean out approximately 99 existing rolling dips, armor 3 drainage crossings, and install approximately 10 new rolling dips |
| **Red Reef Trail (21W08)** | Trail Prism Drainage Treatment and Monitoring | Clean out approximately 130 existing rolling dips, armor 3 drainage crossings, and install approximately 14 new rolling dips |
| **All trails within burned area** | Closure through first winter | Can be implemented as part of an area closure |
| **Major entry points into burned area** | Install closure signs | Can be implemented as part of an area closure |
| **Trailheads leading into burned area** | Install warning signs prior to lifting of closure | Sixteen signs at trailheads listed above, to remain after closure is lifted |
| **Big Caliente Day Use Area** | Closure through first winter | Monitor and install signs |
| **Upper Lake Day Use Area** | Closure through first winter | Monitor and install signs |
| **Lower Lake Day Use Area** | Closure through first winter | Monitor and install signs |
| **Rock Creek Campground** | Closure through first winter | Monitor and install signs |
| **Middle Santa Ynez Campground** | Closure through first winter | Monitor and install signs |
| **P-Bar Campground** | Closure through first winter | Monitor and install signs |
| **Middle Lion Campground** | Closure through first winter | Monitor and install signs |
| **Rose Valley Campground** | Closure through first winter | Monitor and install signs |
| **Holiday Group Campground** | Closure through first winter | Monitor and install signs |
| **Divide Peak Staging Area** | Closure through first winter | Monitor; secure perimeter of staging area with pipe and cable |
| **Divide Peak OHV Route** | Closure through first winter | Monitor and install signs |

**Table 5: Trail Treatment Costs**

Ancillary Work: To provide for implementation crew safety, funding is being requested to provide safe egress from implementation areas following the significant rain event which occurred January 7th and 8th. The labor required to complete this work is based on aerial reconnaissance. The high volume of precipitation which occurred in a short time period combined with post-fire conditions resulted in significant soil and debris hazards within trail corridor. The ancillary work proposed is designed to provide access to implement normal BAER

treatment and ensure timely egress for work crews in the event of an emergency. These trail sections will be opened to a lesser standard than normal trail standards as they are only to allow for the safe movement of crews to implement trail prescriptions to affected trails. It should also be noted that the roads providing access to the more remote trailheads will require similar treatment before some trails can be accessed.

Funds are also included to pay for an Assistant District Recreation Officer from the local unit ($420/day) for administration, and for an AD resource specialist (trails specialist), average $420/day, to provide consultation, logistics, and oversight.

**Table 6: Monitoring Costs**

Each monitoring inspection tour will cover the treated area of the trail requiring two inspectors for safety reasons ($280/day each). The budget allows for monthly inspections during the winter season (November through April), which is sufficient to allow minor damage to be corrected and major damage to be reported after each significant weather event.

**Table 7: Protection/Safety Costs**

Although the recommendation of closure and warning signage is far less costly than the barricade on the Divide Peak OHV staging area, the barricade is being recommended due to past incidents in which signage has been ignored. The magnitude of consequences to both property and life and safety combined with the low probability of success of posted closure signs deems the barricade a necessary, (although costly), treatment.

Two inspectors (5 days each at $250/day) will be required to perform the recommended pre-opening inspection of the treatment implemented trails.

The recommended sign is available from the following supplier:

FASTSIGNS of Ventura
3959 East Main Street
Suite A
Ventura, CA 93003

805-658-1099

https://www.fastsigns.com/264-ventura-ca


(e) Probability of completing treatment in first year prior to damaging storms or events: HIGH

(f) Probability of treatment success: HIGH

## III. Discussion/Summary/Recommendations

Primary treatments are for the mitigation of property at risk. Trail, campgrounds, and day use area closures through the winter season, when most high risk snags should fall, will mitigate most of the threat to life and safety of forest visitors who will use the trails and impacted by the Thomas Fire.

Installing drainage structures able to handle the increased water flow off the moderate and high intensity burn areas will mitigate the risk to property as a direct result of the fires. In the Thomas Fire, the trails are the most “at risk” asset. Trails, like roads, represent a capital investment in a transportation system. This transportation system serves the forest visitors as a recreation opportunity within the Recreation Opportunity Spectrum.

Trail treatments are recommended for sections of trail deemed most at risk, when those treatments can be accomplished in a timely manner. Recommended measures include trail closure for the first winter at a minimum to provide for public safety. This could be accomplished as part of an area closure and should be accompanied by patrolling for effectiveness.

Inspections during the first winter season to monitor treatment effectiveness after major weather events are also recommended.

There is a high probability that, after the first winter, the workload to open and maintain trails to pre-fire conditions will exceed the normal forest program of work and funding levels. Post-fire impacts will continue for several years after the emergency has subsided and will continue to

pose a risk for forest visitor life and safety. It is recommended that the forest seek out additional funding sources to complete what could be a huge workload to restore trails to pre-fire conditions.

## IV. References

Burned Area Emergency Response Treatments Catalog
Forest Service Handbook
FSH 2309.18 – Trails Management Handbook
FSH 2509.13 – Burned Area Emergency Rehabilitation Handbook

## V. Appendices

Map